Norman Wells Socio-Economic Impact Monitoring Program
1985 Methodological Report

Report 1-85

Prepared for:

Department of Indian Affairs and Northern Development
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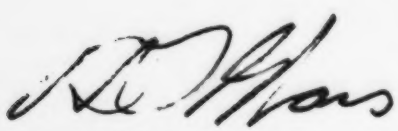
PREFACE

In 1982, the Department of Indian Affairs and Northern Development began its socio-economic impact monitoring program in connection with the Norman Wells Oilfield Expansion and Pipeline Project. This program, carried out under the direction of Professor R.M. Bone of the University of Saskatchewan, is, we believe, the first of its kind. Focussing on four Mackenzie Valley communities in the vicinity of the Norman Wells Project, this study was specially designed to allow monitoring of selected social and economic impacts through field surveys done before, during and after construction. The objective of the first field program, carried out in 1982, was acquisition of the baseline data, while the 1983 and 1984 field surveys captured the situation during the active construction phase. The 1985 fieldwork, done for the first time in all four of the survey communities by native organizations, provided the picture for the immediate post-construction period.

Various aspects of the 1982-84 portion of the project were analysed in the 1984 series of reports. This series discusses certain perspectives from the 1985 work, and, as well, deals with changes in selected factors between 1982 and 1985. In a subsequent, and final, series subjects dealt with will include the overall impacts of the Norman Wells Project and a discussion of the monitoring of socio-economic impacts in Canada.



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BACKGROUND TO THE NORMAN WELLS SOCIO-ECONOMIC IMPACT MONITORING PROGRAM

In mid-1979, Esso Resources Canada Ltd. and Interprovincial Pipeline Ltd. initiated discussions with the federal government concerning a major resource development project in the Mackenzie Valley in the Northwest Territories. This project, the Norman Wells Oilfield Expansion and Pipeline Project, was designed to increase production of oil at Norman Wells and carry this increased production through a small diameter pipeline from Norman Wells to Zama, Alberta to connect with the national oil pipeline system. The proposed project was brought to the attention of people in the Mackenzie Valley communities through community information meetings arranged by the companies and designed to inform local residents and businessmen of the potential job and contract opportunities associated with project construction.

During 1980, public hearings were held in northern communities by both the Federal Environmental Assessment and Review Office and by the National Energy Board. These public hearings provided a forum for individuals, native organizations, village councils, government agencies, companies and special interest groups to present their views on the proposed project and the implications of such development for the North and native peoples. The question of involvement of northern residents and businesses in the Norman Wells Project was of major concern during the public hearings, and both the federal and territorial governments indicated that the degree of northern participation in the project would be a key factor in their consideration of whether to approve or reject the Norman Wells Project. On July 30, 1981, the federal government announced its approval, subject to a two-year delay in the commencement of construction to allow government, the companies and northerners time to prepare for their participation in this project.

In early 1982, the Department of Indian Affairs and Northern Development recognized the need to monitor the impacts of the project on the four communities located along the pipeline route. These communities, Norman Wells, Fort Norman, Wrigley and Fort Simpson, were regarded as the ones most likely to receive the bulk of the socio-economic impacts caused by the construction of the Norman Wells Project. All of the socio-economic impacts had potentially positive and negative effects on the communities and local people, and the monitoring program was intended to capture these and evaluate them against the background of pre-construction baseline data on selected indicators.

Carried out by the Department of Geography of the University of Saskatchewan under the direction of Dr. Robert M. Bone, the monitoring program consisted of gathering data from local residents on their household and business characteristics over the course of the construction phase. The framework for this work consisted of three parts: (1) pre-construction phase; (2) construction phase; and (3) a post-construction phase. The field work and data preparation took place from 1982 to 1986. A series of reports based on the data may be obtained from the Department of Indian Affairs and Northern Development.

1. INTRODUCTION

In 1982, the University of Saskatchewan was contracted by the Department of Indian Affairs and Northern Development (DIAND) to monitor the socio-economic impacts of the Norman Wells Oilfield Expansion and Pipeline Project upon the four communities of Norman Wells, Fort Norman, Wrigley and Fort Simpson. This monitoring program is under the direction of Dr. Robert M. Bone.

To identify the impacts, an annual interview of each business person and a bi-annual interview of each head of household was to take place in each community from 1982 to 1986. These structured interviews consisted of responses to two questionnaires, one designed for businesses and one for households.

At the request of the local band councils neither the household nor business interviews were undertaken at Wrigley or Fort Simpson in 1984. Also, DIAND decided that 1985 would be the last year for the monitoring study because of the early completion of the Norman Wells Project. Consequently both interviews were conducted this year.

A major change in interview procedure occurred in 1985 when local native development corporations were contracted by DIAND to conduct the survey in each of the communities. This approach differs from the past surveys when research staff from the

University of Saskatchewan undertook the interviews with assistance from local people.

The purpose of this report is to:

1. Outline changes made to the 1985 questionnaires;
2. Provide a detailed description of how the survey program worked; and
3. Assess the effect of using local surveyors to complete the community-wide business and household questionnaires.

2. CHANGES TO THE 1985 QUESTIONNAIRES

In each year of this monitoring program changes have been made to the two questionnaires. The two reasons for these changes are: (1) questions are added or deleted which are specifically aimed to assess the impacts for each of the three stages of the monitoring program (pre-construction, construction and post-construction); and (2) changes made to improve existing questions in terms of clarity or an improved response rate. In this section changes made to the 1985 questionnaires are outlined.

2.1 Questions to Assess Post-Construction Impacts

One of the concerns expressed by local residents over the construction of the Norman Wells Project was the potential "boom-bust" situation in the area when the project was over (The

DIAND Norman Wells Socio-Economic Monitoring Program Report 9-84 p.26). One of the main purposes of the 1985 survey is to assess the magnitude of the "bust" conditions in the four communities. In measuring these conditions not only are questions which are asked every year useful, for example employment levels, but questions aimed specifically at post-construction impacts are needed.

The following question was asked in the 1985 business questionnaire:

5. What impact has the completion of the Norman Wells Project had on your business?

__ increase business

__ decrease business

__ no impact

__ go out of business/cease operations in this community.

The purpose of this question is to aid in assessing the impact of the post-construction phase on the business community.

In the household questionnaire one question which was added to help monitor the impact of the post-construction period on migration was:

5. c) If planning on leaving this community would another large development project in the Mackenzie Valley likely keep you in the NWT?

The purpose of this question was not only to obtain the number of potential migrants from the study communities but evaluate the impact of another development project in slowing this out-migration.

Another question which was added to the household questionnaire was intended as a wrap-up question to the monitoring program. In this question each household was asked to estimate the amount of economic gain which was obtained by the household from the construction of the Norman Wells Project. Also, they were asked what they had used this economic gain for (e.g. - savings, hunting equipment, entertainment or food/clothing). This question is designed to indicate the overall economic benefits of the Norman Wells Project to the residents of the study communities.

Similar wrap-up questions were asked to determine the overall social impacts and impact on native people of the construction of the Norman Wells Project. Although these questions had been asked in the past, in 1985 important changes were made. Previously these were open ended questions and the respondents rarely identified more than one potential impact. In 1985, in an attempt to better identify the perceived social impacts, several potential impacts were provided and the respondent suggested whether they felt this had had a:

- strong effect
- some effect
- no effect
- decreased effect.

As well as providing several potential impacts, space was provided for the respondent to add any additional impacts which they felt had occurred.

It is important to note that these questions were added to the 1985 questionnaires in attempt to identify the impacts of the Norman Wells Project in the post-construction phase and the overall impacts. The responses to these questions are an important supplement to the core group of questions in assessing the impacts of the Norman Wells Project in the framework of the pre-construction, construction and post-construction phases.

2.2 General Changes to the Questionnaires

Several changes were made to the 1985 questionnaires to improve the clarity of the questions or to improve the response rate. One of these changes which occurred in both the business and household questionnaires was to have the respondent identify their income and their businesses revenues/expenditures among several categories. In the past the actual value was asked for in both cases. The change in the response rate to the income question is discussed later (Figure 2) and it is apparent that it

is quite substantial. As is discussed later it is difficult to assess whether this change or the change in the interviewing procedure accounted for the improved response rate.

In the 1984 household questionnaire, the respondents were asked to rank several reasons for coming to the study community as well reasons if they were planning on leaving. Since these questions which required ranked responses were confusing to the interviewee, they were removed from the 1985 household questionnaire. An open ended question was added to the 1985 questionnaire asking the respondent to list the reasons for coming to or leaving the community. This type of question was more easily understood and therefore their responses are more complete.

Also, the questions in the 1984 household questionnaire which were aimed only at employees of Esso, IPL or their contractors were removed. The reasons for this were that often the contractors did a variety of other business besides that for Esso or IPL, the result of this was confusion among the respondents as to whether they should answer these questions for project employees.

Finally, a question was added to the consumer section of the household questionnaire on the average amount of the weekly shopping bill of the household. The aim of this question is to

aid in the analysis of the consumer information of the survey.

3. THE 1985 SURVEY PROGRAM

In 1985, a major change in the conducting of the questionnaires took place which resulted in the local native development corporations playing a direct role in the survey program. Contracts to conduct the DIAND survey in each community were signed between DIAND officials represented by the Norman Wells Federal Coordinator's Office and Bosworth Creek Enterprises Ltd. in Norman Wells, Tulita Development Corporation in Fort Norman, the Wrigley Dene Band in Wrigley and the Fort Simpson Metis Association in Fort Simpson.

By the terms of the contract, three groups had important roles to play in the administering of the survey.

(1) The development corporation was responsible for the hiring and paying of the surveyors and for providing facilities to conduct a two day training program.

(2) The Federal Coordinator's Office was responsible for insuring satisfactory performance of the contract.

(3) The research team from the University of Saskatchewan was responsible for conducting the training program and for checking the completed questionnaires.

3.1 The Training Program

The training program for the local surveyors consisted of a two day workshop. The major purpose was to familiarize the surveyors with the questionnaires. The workshop was designed and conducted at the office of each development corporation by members of the University of Saskatchewan research team.

The first portion of the training program involved an explanation of the purpose of the DIAND socio-economic survey and how the final results are presented and can be used by local organizations. The morning of the first day of the workshop focused on a discussion of each question in the household questionnaire including a self-enumeration by each trainee. This method familiarized the local surveyors with the nature and purpose of each question and allowed them to complete one questionnaire. While discussing each question the University of Saskatchewan research team provided potential uses and past results to that question. From this approach the trainees gained a fuller understanding and appreciation of each question and the total survey program.

The next phase of the workshop focused on "controlled" interviews. The trainees selected two "friendly" residences and conducted an interview with the head of each household. In this way, they gained practical experience at administering the

questionnaire. Upon completion of these two questionnaires, the surveyors returned to the office to discuss any difficulties with the University of Saskatchewan research team.

The last phase of the workshop took place in the second day. It followed a similar approach to day one except it dealt with the business questionnaire. The first step was to go over each question, then the local official of the development corporation was interviewed in the classroom in order for the trainees to gain experience with this questionnaire. Afterwards, the trainees selected a few businesses to interview. Following the interviews, the trainees returned to the classroom to discuss their experiences with the research team from the University of Saskatchewan.

3.2 Selection of the Interviewees

Since all households and businesses were to be contacted, the local surveyors themselves selected who they wanted to survey. However in Fort Simpson the community was divided into sections and the surveyors were assigned to particular sections. This sectioning was done after the first week at the request of the surveyors who were concerned about duplication of interviews. Due to the large size of Norman Wells and Fort Simpson, each completed household or business was marked on a town map. This helped to insure that there would be no duplication and that all

households and businesses were contacted. At the end of the day the completed surveys were turned over to the research staff to check for completeness and any inconsistencies. If major problems had been discovered, then the questionnaire would be returned to the surveyor to rectify the problem. In fact, only minor inconsistencies were identified and these were corrected by discussing them with the surveyors.

The incentive for the surveyors to complete a questionnaire was strong as payment was determined by the number completed. The development corporations determined the pay scale for the completed household and business questionnaires. In all cases, the payment was higher for a household questionnaire than a business one.

4. THE EFFECT OF THE LOCAL SURVEYORS

The new method of conducting the community surveys raises an important question: "Is the data collection affected by using local surveyors?" Three methods are used to examine the effect and performance of the local surveyors: (1) the overall response rate to the questionnaires in each community; (2) the response rate to certain questions in each community; and (3) the rate of completion of the questionnaires in each community.

4.1 The Overall Response Rate

The first method of measuring the performance of the local surveyors is the response rate to the household and business questionnaires in each community. Figure 1 indicates the percentage of households which completed the questionnaire in each community from 1982 to 1985.

With a total of 491 completed household questionnaires from the four communities, the average response rate for households was just over 81% in 1985. This rate compares favourably with 75% for the four communities in 1982 when 435 questionnaires were completed and with 71% for the two communities surveyed in 1984 when 188 household questionnaires were completed.

As a comparative note the Edmonton Area Study, which has been gathering information on conducting interviews, obtained a 55% response rate in 1984 and a 57% response rate in 1985 on interviews conducted without an appointment (Population Research Laboratory p.1). These interviews were similar to the household questionnaire except that the Edmonton Area Study had an introductory letter sent one week prior to the interview and their interview lasted longer. It is apparent that the overall response rate to the household questionnaire for the Norman Wells Monitoring Project compares favourably to the Edmonton study and that the 1985 results using local surveyors are even better.

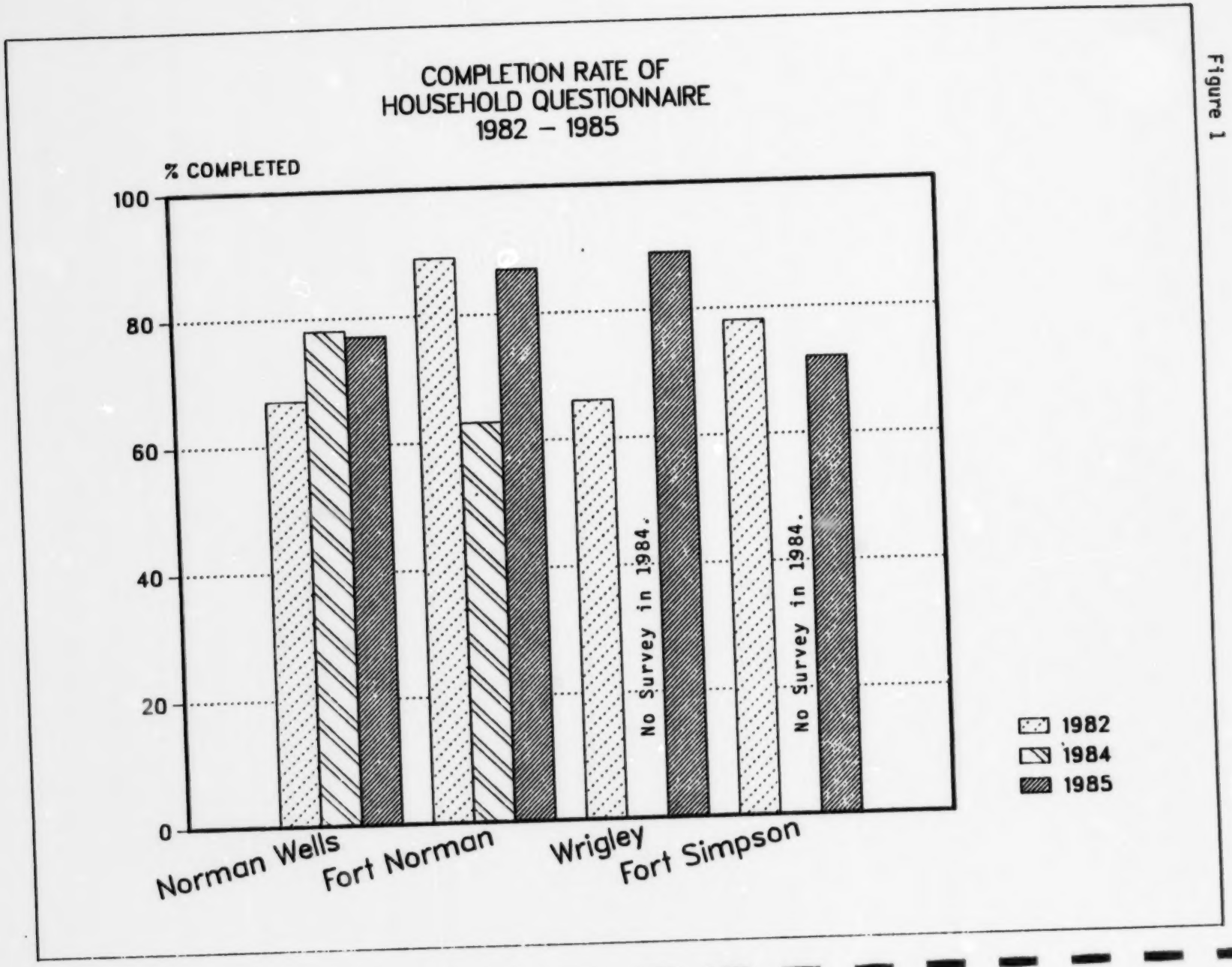

COMPLETION RATE OF
HOUSEHOLD QUESTIONNAIRE
1982 – 1985
% COMPLETED
100
80
60
40
20
0
No Survey in 1984.
No Survey in 1984.
1982
1984
1985
Norman Wells
Fort Norman
Wrigley
Fort Simpson

Figure 1

Unfortunately the total number of 1985 business interviews was substantially lower than in previous years (182 in 1982, 92 in 1984 for two communities and 134 in 1985). In past surveys nearly 100% of the businesses responded to the questionnaire in each of the communities. In 1985, the local surveyors in Norman Wells and Wrigley were able to conduct interviews with nearly 100% of the business people. However, the Fort Norman surveyors completed only half of the business interviews and Fort Simpson completed about 40%. Preliminary analysis also indicates that the quality of responses to the business questionnaires in all four communities is down.

It is difficult to speculate as to the reason for the low response rate to the 1985 business questionnaire but three possible explanations are:

1. The local surveyors may have been reluctant to approach some of the business people in their community so some businesses were not contacted.
2. The business people may have grown tired of answering questionnaires and thus were less likely to answer in 1985.
3. The business people were less willing to give sensitive information to local people than to researchers from the south.

The lower than "normal" response rates to the business questionnaire was the major shortcoming in the 1985 Summer Survey Program.

4.2 The Response Rate to Selected Questions

The analysis of the overall response rate to the questionnaires indicates that the 1985 survey season was the most successful. This increased overall rate, however, was not the only impact of the local surveyors. In this section certain questions are examined to identify changes in the response rate with the change in the interviewing procedure. This examination will focus on 1982 and 1985 when the survey took place in all four communities.

The question on income in the household questionnaire provides a good example of the effect of the local surveyors (Figure 2). Questions on an individual's income are often considered personal and are therefore a very sensitive part of any questionnaire. For the Norman Wells Monitoring Program the income question provided, on average, the lowest response rate of all the questions. Figure 2 illustrates the success of the local surveyors in obtaining a response to the income question. This was especially true for Fort Norman and Wrigley where the response rate nearly doubled. In 1982, the average response rate to the income question was 54% for the four communities. In 1985 the average response rate for the four communities rose to 80%. As was discussed earlier, it is difficult to assess whether the change in interviewing procedure or the change in the income question, to categories rather than actual amounts, accounts for

the improved response rate. It is likely that both were factors in the substantial improvement in the response rate to the household income question.

The response rate to the question on the consumption of country food is more representative of most questions on the survey. Figure 3 indicates that the response rate to this question was extremely good with both methods of administering the questionnaire. The average response rate was 93.5% in 1982 and 99.7% in 1985 with three of the four communities obtaining a 100% response rate.

The benefit of contracting the local development corporations is clear. Not only was the overall response rate improved but the response rate to sensitive questions dramatically improved in 1985. The advantage gained is that conclusions based on a larger data set are more sound than with a smaller data set.

One aspect of this improved ability to obtain responses in 1985 needs to be investigated further. Figure 4 indicates the change in the percentage of native residents in Fort Simpson and Norman Wells from 1982 to 1985. In each case the proportion of native residents increased by almost 10%. This change may be attributed to one of the following factors:

1. different migration rates to and from each community by natives and non-natives; or

Figure 2

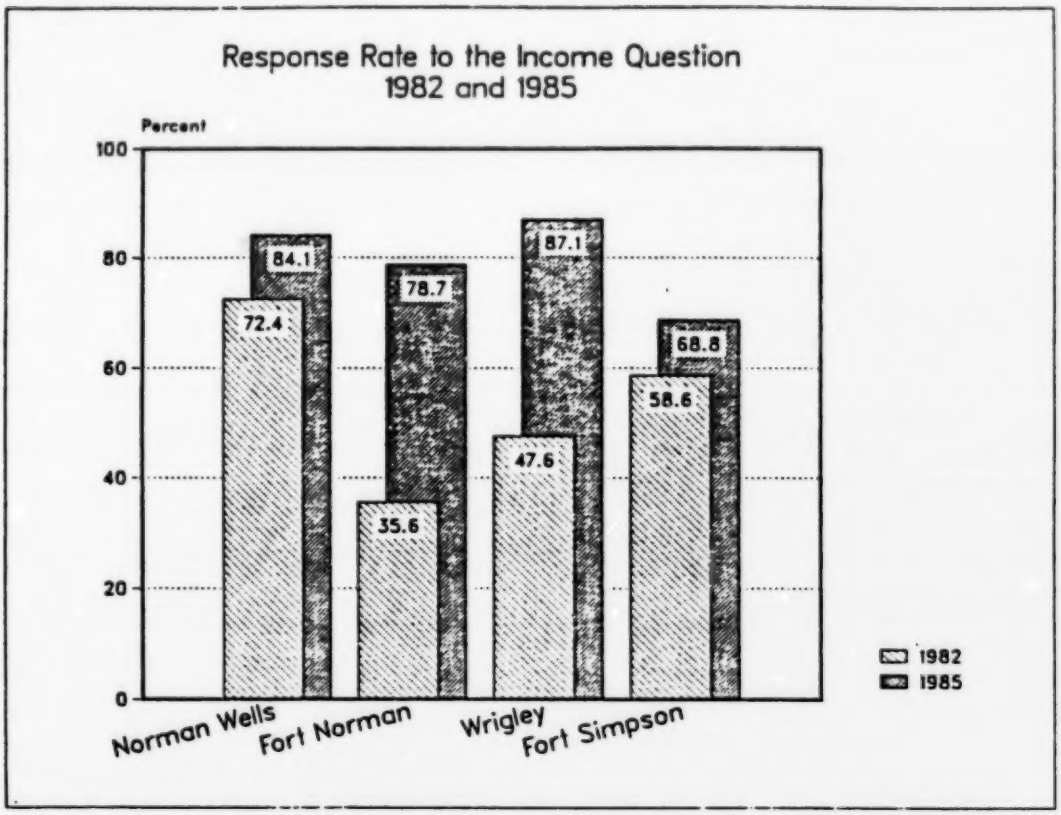
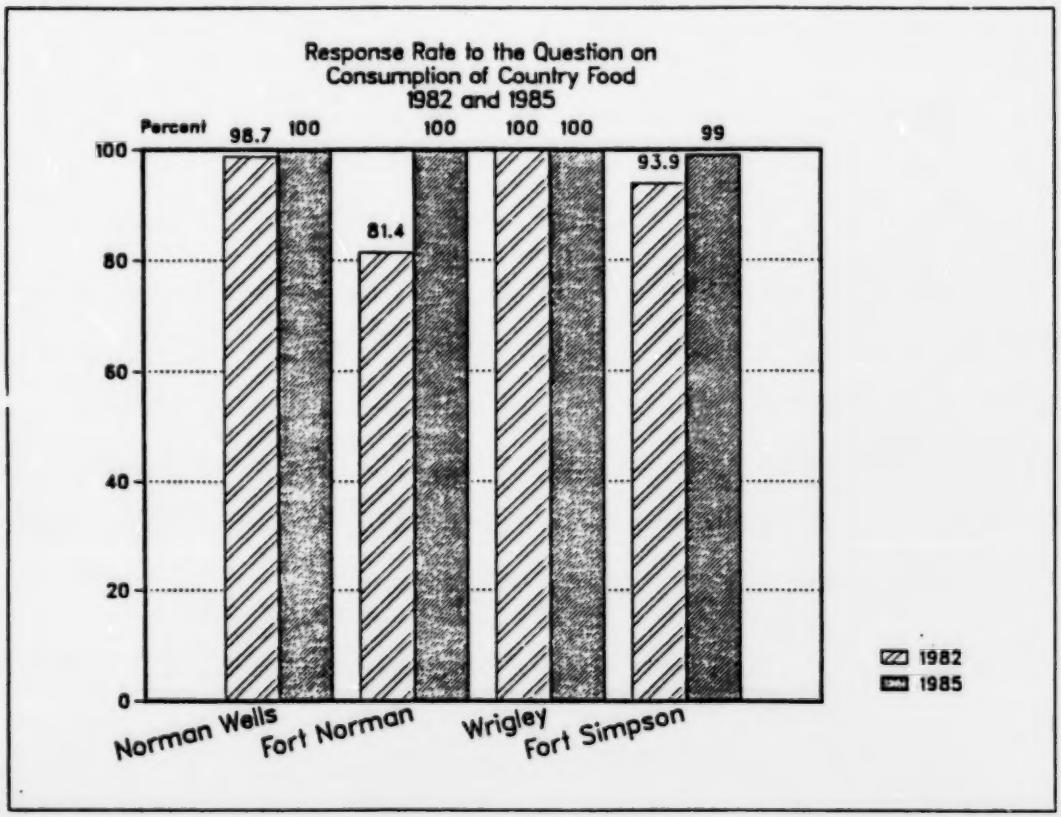


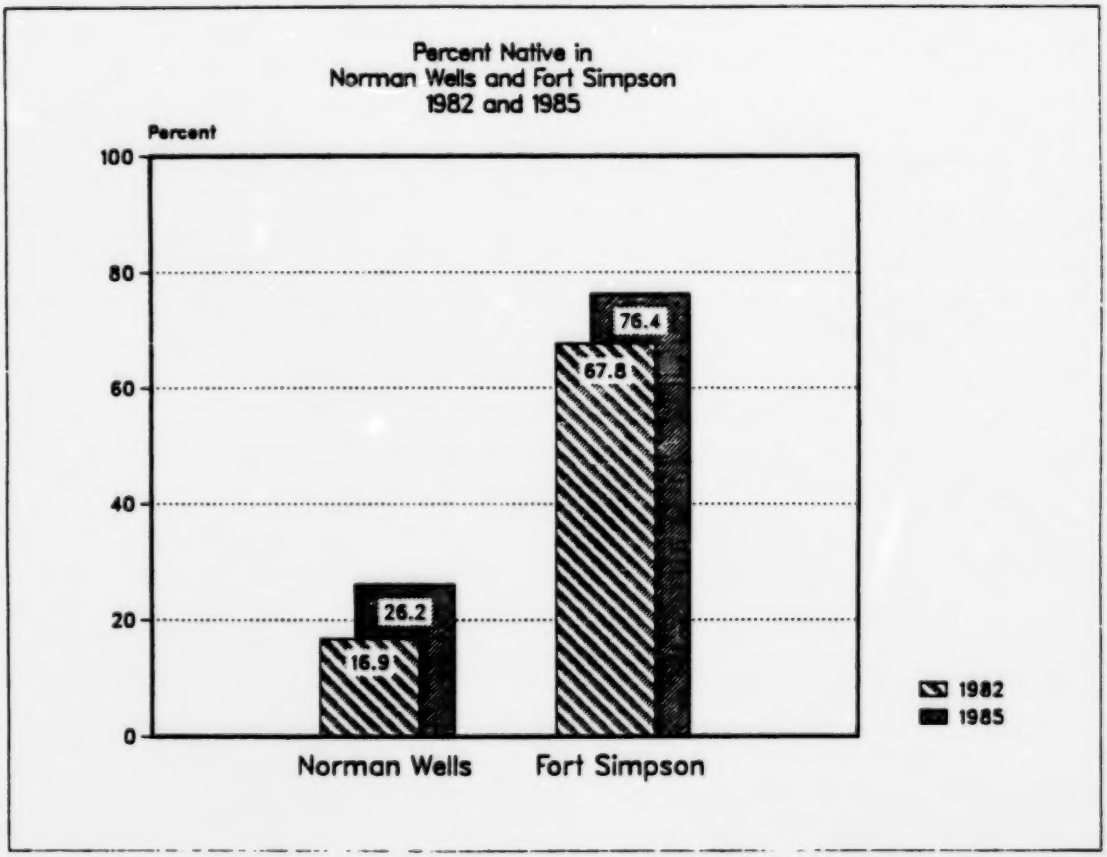
Figure 3



2. an improved ability to locate and obtain responses from native households by the native development corporations in these communities.

Indications while in the communities were that there was an improved ability to identify and obtain response from the native households.

Figure 4



The reason for this is simply that because of the size of the communities the local surveyors knew almost all members of the community. An important result of the change in the interviewing procedure is that the number of native households participating

in the survey has increased. The implication of this is that overall community responses to certain questions may be affected. For example, if it was generally believed that unemployment was higher among natives than non-natives in Fort Simpson, then changes in the community unemployment rate from 1982 to 1985 might not be actual. Instead, the increased unemployment may be a manifestation of the increased number of native households participating in the survey.

Consequently all 1985 analysis should examine native/non-native responses as well as responses at the community level.

4.3 The Rate of Completion of the Questionnaires

The rate of completion of the questionnaires is the third method by which the performance of the local surveyors is analyzed. The completion rate is defined as the daily rate at which the survey work was completed in each community. It is expressed as the number of questionnaires completed each day as a percentage of the total number of questionnaires eventually completed in that community. Norman Wells and Fort Simpson are the examples for this discussion because due to the small number of interviews, Fort Norman and Wrigley only took a few days each to complete.

Figure 5 gives a comparison of the rate of completion of

households in Norman Wells for 1984 and 1985. This figure clearly indicates that the rates of completion for 1984 and 1985 were extremely similar. The only subtle difference between the two years is that the local surveyors were able to get off to a quicker start in 1985 than the southern research team in 1984. This difference was due to their familiarity with the community and acceptability to certain households, i.e., friends and relatives. The general pattern for the rate of completion is a quick start and then a diminishing rate as time progresses. This general pattern seems to hold true for Fort Simpson and Norman Wells (Figures 6 and 7).

Figures 6 and 7 reveal an interesting pattern that emerged in the two larger communities. In Norman Wells, it was apparent that the survey of native households proceeded at a much more rapid rate than the those of the non-native households (Figure 6). For example, after ten days of surveying nearly 95% of the native households had been completed. Of the non-native households which were surveyed in Norman Wells only 65% had been completed after ten days. Fort Simpson reveals a similar pattern. After five days, 75% of all the native households surveyed in Fort Simpson had been completed. Only 57% of the non-native households had been done after five days. Clearly, the native surveyors were more inclined to survey native than non-native households in both of these communities. This inclination was an asset in Norman Wells as the local surveyors

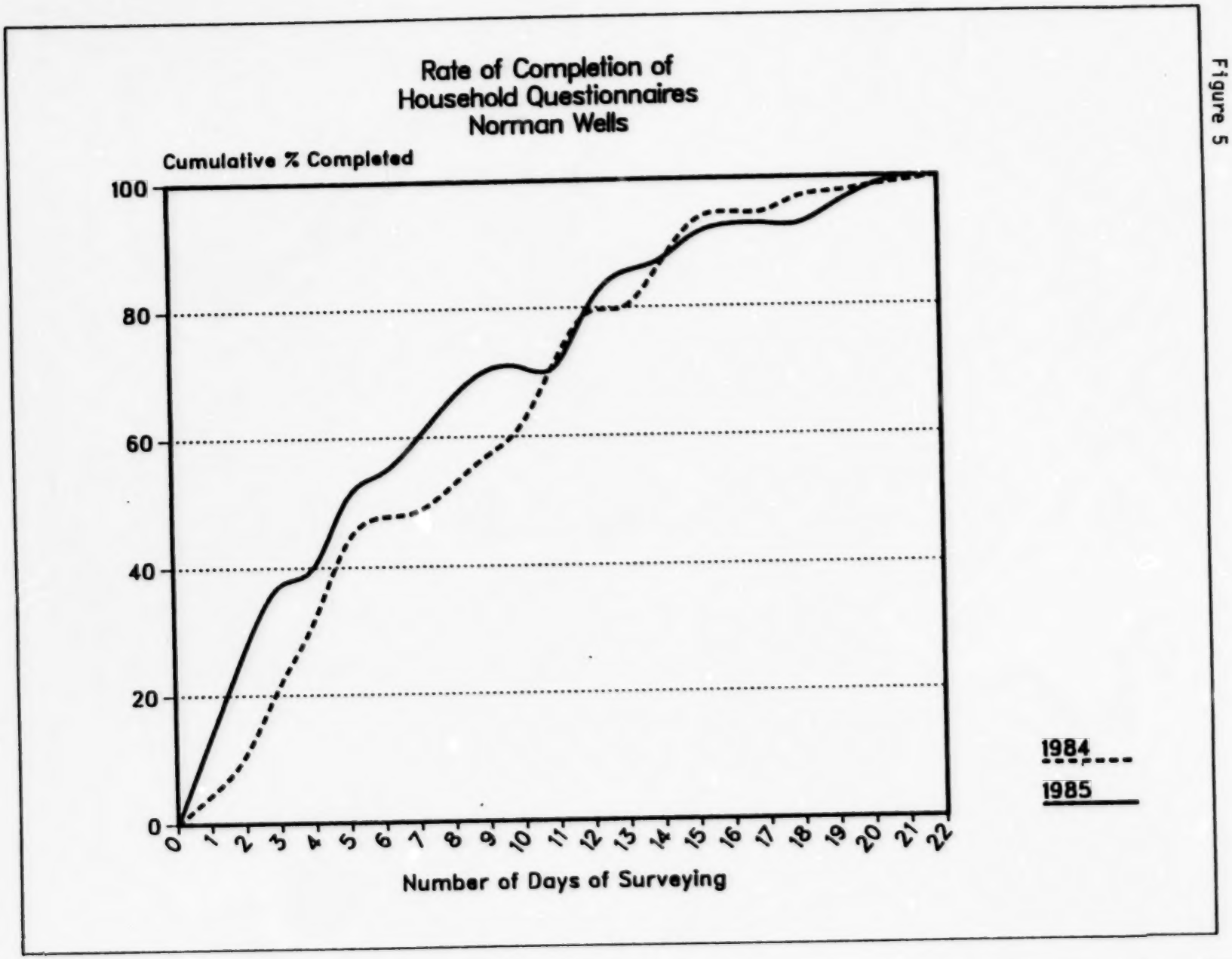

Rate of Completion of
Household Questionnaires
Norman Wells
Cumulative % Completed
100
80
60
40
20
0
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
Number of Days of Surveying
1984
1985

Figure 5

Figure 6

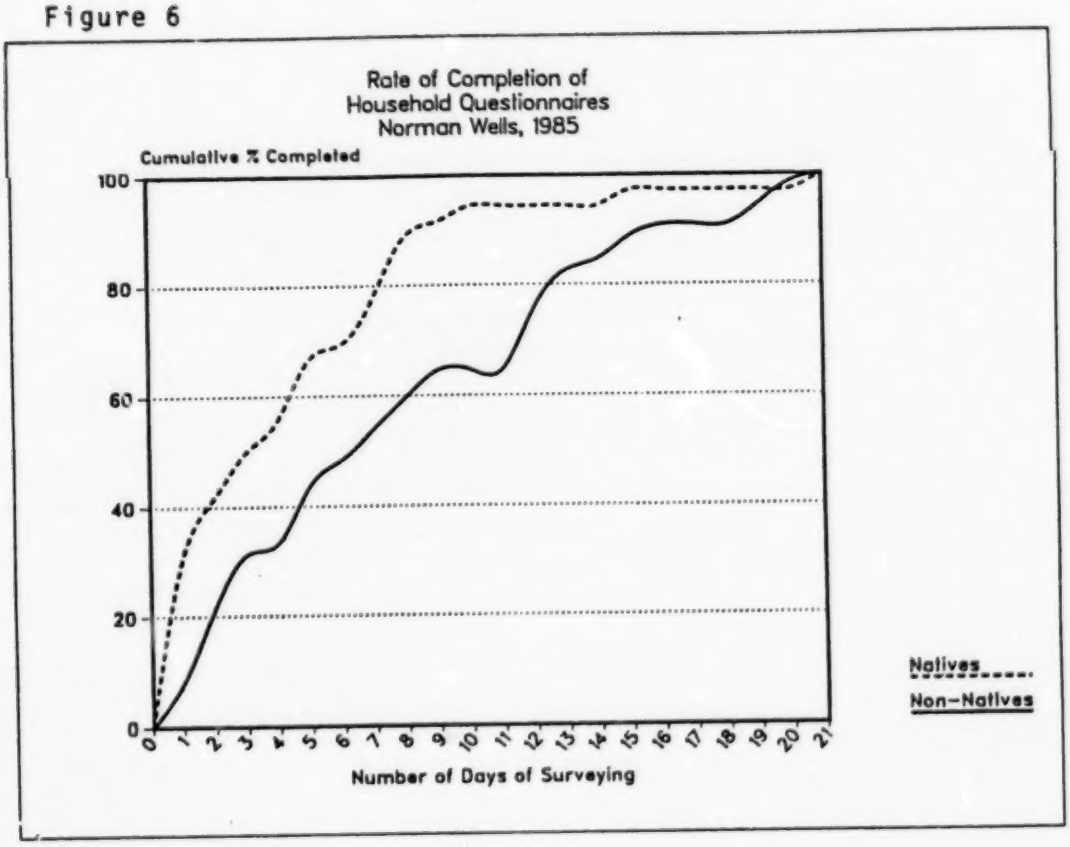
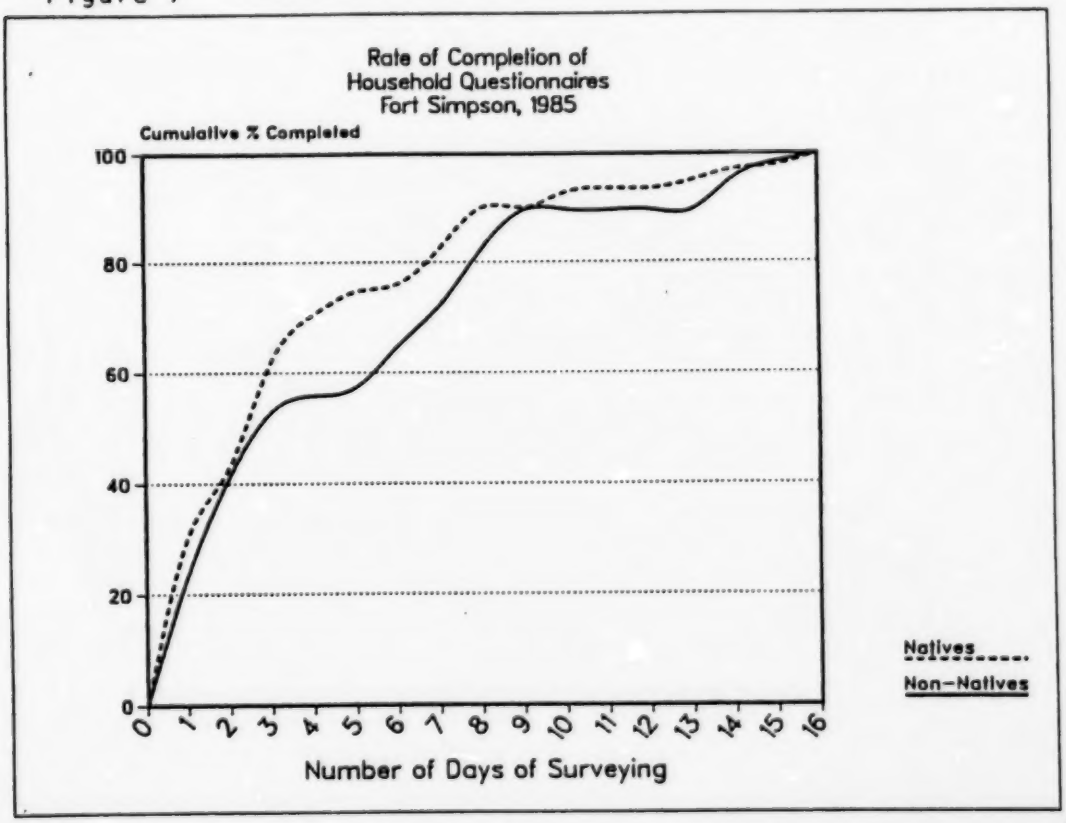


Figure 7



were better able to identify and obtain response from native households which had not previously participated in the survey.

5. CONCLUSION

Overall, the use of the local development corporations to conduct the data gathering surveys for the Norman Wells Socio-economic Monitoring Program in 1985 was very successful. Clearly, the response rate to the household questionnaire was better than in the past and preliminary analysis shows that the quality of the household questionnaires is good. The conducting of the business questionnaires was less successful.

The benefits and costs of contracting the local development corporations and using local surveyors may be summarized as follows:

1. Increased involvement of natives and local people in the DIAND Norman Wells Socio-economic Monitoring Program. This helped to create a better understanding of the questionnaire and some of its potential uses at the community level.

2. There was an injection of money into the native/local economy.

3. The cost of conducting the questionnaires was substantially higher in 1985.

4. An improved ability to obtain responses from native households. Preliminary results also show a substantially improved response rate to certain sensitive questions in the questionnaire. Unfortunately, the participation of businesses was below the level of previous surveys.

5. Provided training and experience to each of the

development corporations in administering a questionnaire. This may lead to involvement in other community surveys (e.g. - the 1986 Census).

The benefits outweigh the costs in this case and the contracting of the local development corporations and using local surveyors should be included in all future monitoring efforts.

6. REFERENCES

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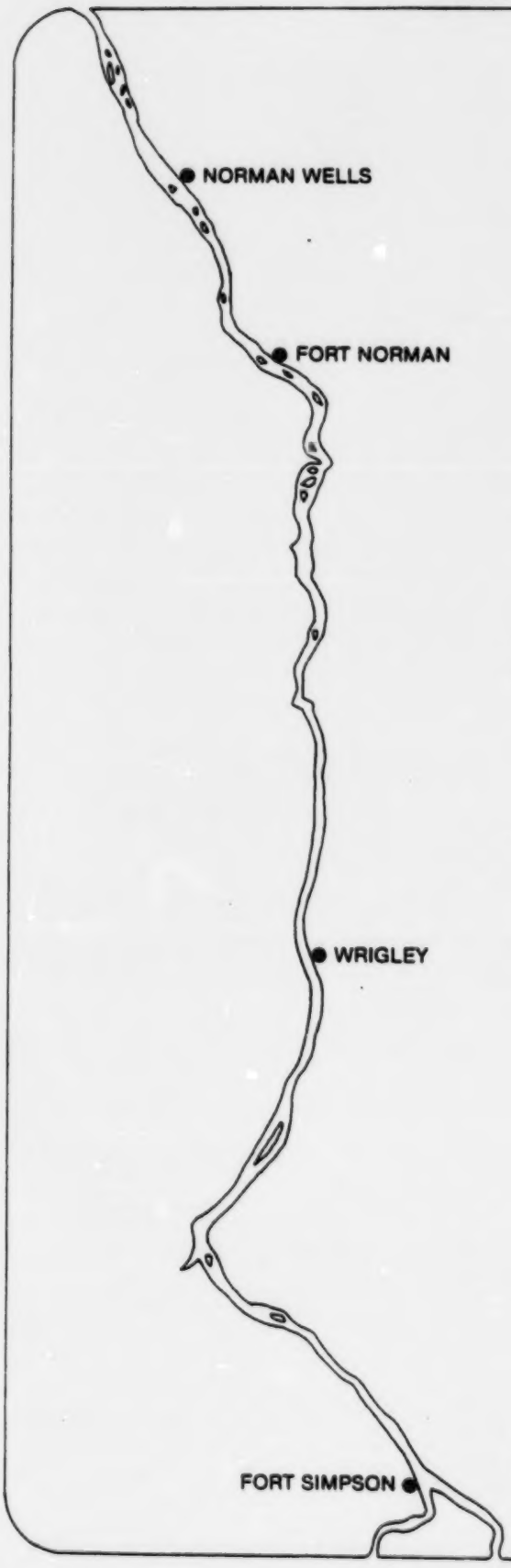
7. APPENDIX A

This appendix contains the household and business questionnaires from 1984 and 1985. The 1984 questionnaires were conducted in Norman Wells and Fort Norman in May and June of 1984. The 1985 questionnaires were conducted in Norman Wells, Fort Norman, Wrigley and Fort Simpson during July and August of 1985.



NORMAN WELLS PROJECT

COMMUNITY HOUSEHOLD SURVEY

The purpose of the Department of Indian Affairs and Northern Development Household Survey is to:

1. Prepare a community database
2. Monitor the impact of the Norman Wells Project in the four MacKenzie Valley communities
3. Evaluate data and prepare reports for your community to help identify the costs and benefits of the Norman Wells Project.

John Hucker

Director-General
Northern Policy and
Coordination Branch

Department of Indian
Affairs and Northern
Development
Ottawa

Interview Log 1985

1. Community: _____

2. Date: _____ _____ _____
   day month year

3. House size:

   small (< 600 ft^2) ☐

   medium (600 - 1000 ft^2) ☐

   large (> 1000 ft^2) ☐

4. House Type:

   Tent ☐

   Log/Shack ☐

   Frame ☐

   Trailer ☐

   Apartment ☐

   Other _____ ☐

5. Response Type:

   no answer ☐ ☐ ☐

   informant ☐

   refusal ☐

   completed ☐

6. House Condition:

   low ☐ medium ☐ high ☐

Population-Occupation Registry

1. Interviewee: _____

2. How long have you lived in this community?

   _____ years

3. If you have moved to this community in the last five years, did you move because of the Norman Wells Project?

   no ☐ yes ☐

4. If you have moved to this community in the last five years where was your previous principal residence?

   _____ _____
   community years

5. Do you or any members of your household plan to leave this community to live permanently in another community in the next 12 months?

   no ☐ yes ☐

   a. If ***yes***, where? _____

   b. If ***yes***, why? _____

   c. If yes, would another large development project in the Mackenzie Valley likely keep you in the NWT?

   no ☐ yes ☐

6. In the last 12 months, have any members of your household left this community to live permanently in another settlement (excluding students)?

   no ☐ yes ☐

   a. If ***yes***, where? _____

   b. If ***yes***, why? _____

   _____

7. Occupant Information (list all household members)

Surname							
First Name							
Sex/Age							
Descent							
Languages Spoken	1..... 2..... 3.....	1..... 2..... 3.....	1..... 2..... 3.....	1..... 2..... 3.....	1..... 2..... 3.....	1..... 2..... 3.....	1..... 2..... 3.....
Birthplace							
Marital Status							
Present Activity*							
Education Level							

* Present Activity code: full-time job = 1; part-time job = 2; unemployed = 3; housewife = 4; retired = 5; student = 6; pre-school = 7.

8. Trapping

a) Do you, or a member of your household hold a General Trapping License?

Yes ☐ No ☐

b) Did you, or any member of your household trap in 1984/85?

Yes ☐ No ☐

c) Did you or a member of your household stop trapping to work on the Norman Wells Project?

Yes ☐ No ☐

d) Do you, or a member of your household, plan to return to trapping when the Norman Wells Project is completed?

Yes ☐ No ☐

e) Fur Sales (1984)

less than $301	☐
301 - 600	☐
601 - 1,000	☐
1,001 - 2,000	☐
2,001 - 5,000	☐
more than 5,000	☐

9. Worker Information		1				2				3				4			
First Name																	
Present Employer (or self employed)																	
Present Occupation																	
Length of Employment (starting date)																	
Full-Time/Part-Time*																	
Seasonality (months)		1-3	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3	4-6	7-9	10-12
Other employers from 1982 to July 1985	1.																
	2.																
	3.																
Occupations associated with each employer	1.																
	2.																
	3.																
Employment period associated with each employer (Starting date/ finishing date)	1.																
	2.																
	3.																

*Full time = ≥ 30 hours/week

10. Income Information

	Total 1984 Income				
	1	2	3	4	total household
less than $10,001	☐	☐	☐	☐	☐
10,001 - 20,000	☐	☐	☐	☐	☐
20,001 - 30,000	☐	☐	☐	☐	☐
30,001 - 40,000	☐	☐	☐	☐	☐
40,001 - 50,000	☐	☐	☐	☐	☐
50,001 - 70,000	☐	☐	☐	☐	☐
70,001 - 90,000	☐	☐	☐	☐	☐
90,001 - 110,000	☐	☐	☐	☐	☐
more than 110,000	☐	☐	☐	☐	☐

Income for the first 6 months of 1985

	1	2	3	4	total household
less than $5,001	☐	☐	☐	☐	☐
5,001 - 10,000	☐	☐	☐	☐	☐
10,001 - 15,000	☐	☐	☐	☐	☐
15,001 - 20,000	☐	☐	☐	☐	☐
20,001 - 25,000	☐	☐	☐	☐	☐
25,001 - 35,000	☐	☐	☐	☐	☐
35,001 - 45,000	☐	☐	☐	☐	☐
45,001 - 55,000	☐	☐	☐	☐	☐
more than 55,000	☐	☐	☐	☐	☐

Expected 1985 Income

	1	2	3	4	total household
less than $10,001	☐	☐	☐	☐	☐
10,001 - 20,000	☐	☐	☐	☐	☐
20,001 - 30,000	☐	☐	☐	☐	☐
30,001 - 40,000	☐	☐	☐	☐	☐
40,001 - 50,000	☐	☐	☐	☐	☐
50,001 - 70,000	☐	☐	☐	☐	☐
70,001 - 90,000	☐	☐	☐	☐	☐
90,001 - 110,000	☐	☐	☐	☐	☐
more than 110,000	☐	☐	☐	☐	☐

Consumer Survey

1. Goods and services consumption:

Do you or your household members receive the majority of these goods from business and service institutions in this community?

	Yes	No	N/A	If *No*, where do you receive these goods?
1. Doctor	☐	☐	☐	_____
2. Optician	☐	☐	☐	_____
3. Dentist	☐	☐	☐	_____
4. Banking	☐	☐	☐	_____
5. Appliances-Furniture	☐	☐	☐	_____
6. Drugs-Confectionary	☐	☐	☐	_____
7. Groceries	☐	☐	☐	_____
8. Shoes-Clothing	☐	☐	☐	_____
9. Liquor	☐	☐	☐	_____
10. Hardware	☐	☐	☐	_____
11. Automobiles	☐	☐	☐	_____
12. Lumber	☐	☐	☐	_____
13. Snowmobiles	☐	☐	☐	_____
14. Canoes-Boats	☐	☐	☐	_____
15. Hunting Supplies	☐	☐	☐	_____

2. How often do you shop in these places?

	once a week	once a month	a few times a year	never
Norman Wells	☐	☐	☐	☐
Ft. Norman	☐	☐	☐	☐
Wrigley	☐	☐	☐	☐
Ft. Simpson	☐	☐	☐	☐
Inuvik	☐	☐	☐	☐
Yellowknife	☐	☐	☐	☐
Hay River	☐	☐	☐	☐
Ft. Providence	☐	☐	☐	☐
Edmonton	☐	☐	☐	☐
Mail Order Regina	☐	☐	☐	☐
_____	☐	☐	☐	☐
_____	☐	☐	☐	☐
_____	☐	☐	☐	☐

3. Estimate your household's weekly shopping bill:

- less than $51 ☐
- 51 - 100 ☐
- 101 - 200 ☐
- 201 - 500 ☐
- more than 500 ☐

4. How much of your ***total*** shopping bill is spent in:

Norman Wells	_____%
Ft. Norman	_____%
Wrigley	_____%
Ft. Simpson	_____%
Inuvik	_____%
Yellowknife	_____%
Hay River	_____%
Ft. Providence	_____%
Edmonton	_____%
Mail Order Regina	_____%
_____	_____%
TOTAL	100 %

5. Estimate your household's weekly food bill:

- less than $26 ☐
- 26 - 50 ☐
- 51 - 100 ☐
- 101 - 200 ☐
- more than 200 ☐

6. How much of your household food is 'country food'?

none or almost none	(0 - 5%)	☐
very little	(6 - 15%)	☐
some	(16 - 39%)	☐
about half	(40 - 60%)	☐
quite a lot	(61 - 75%)	☐
most	(76 - 94%)	☐
all or nearly all	(95 - 100%)	☐

Perception Survey

1. Is there a need for more jobs in your community?

   yes ☐ no ☐ undecided ☐

   Full-time Jobs Yes ☐ No ☐

   Part-time Jobs Yes ☐ No ☐

   Seasonal Jobs Yes ☐ No ☐

2. Do you favor increased economic development in the Mackenzie Valley?

   yes ☐ no ☐ undecided ☐

3. If **yes,** do you favor:

   large-scale (mega-type) projects ☐

   small-scale (mini-type) projects ☐

   both ☐

4. Rank the following types of development according to your preference on a scale of 1 to 7; 1 being the most preferred, 7 being least preferred.

   forestry _____ road construction _____

   oil/mining _____ house construction _____

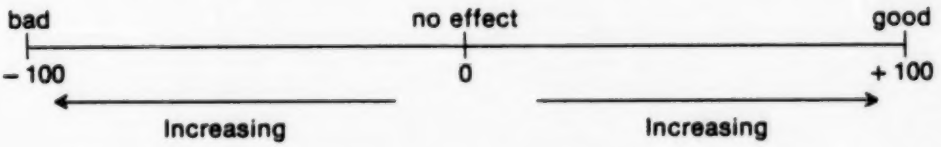
   tourism _____ fish/trap/hunt _____

   pipeline construction _____

5. Do you favour joint development projects between private companies and native organizations?

   yes ☐ no ☐ undecided ☐

6. In economic terms, what effect has the construction of the Norman Wells Project had on your household?



   a) If you gained economically from the construction of the Norman Wells Project (ie. increased wages or business profits), estimate the amount gained:

   zero ☐

   less than $1,001 ☐

   1,001 - 5,000 ☐

   5,001 - 25,000 ☐

   25,001 - 50,000 ☐

   50,001 - 100,000 ☐

   more than 100,000 ☐

   b) If you gained, approximate the percentage of the gain used for:

   Bank/Other Savings _____%

   Business Truck/Equipment _____%

   Automobile/Truck _____%

   Purchased or Remodelled House _____%

   Furniture/Appliances _____%

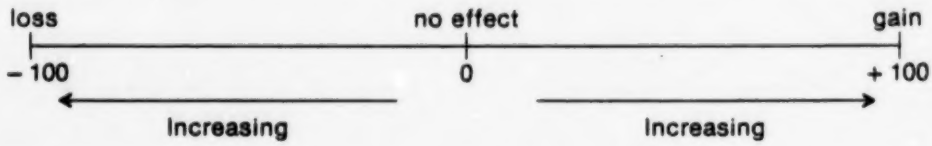
   Hunting Equipment _____%

   Recreation/Travel/Entertainment _____%

   Clothing/Food _____%

   TOTAL 100 %

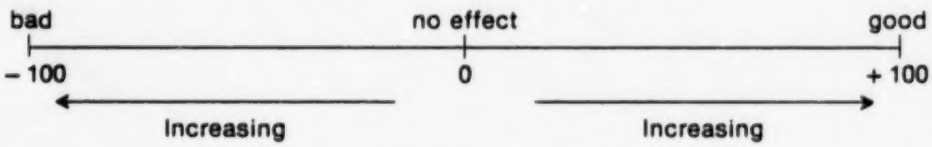
7. In social terms, what effect has the construction of the Norman Wells Project had on your community?



a) Of the following possible social impacts, what effect has each had on your community?

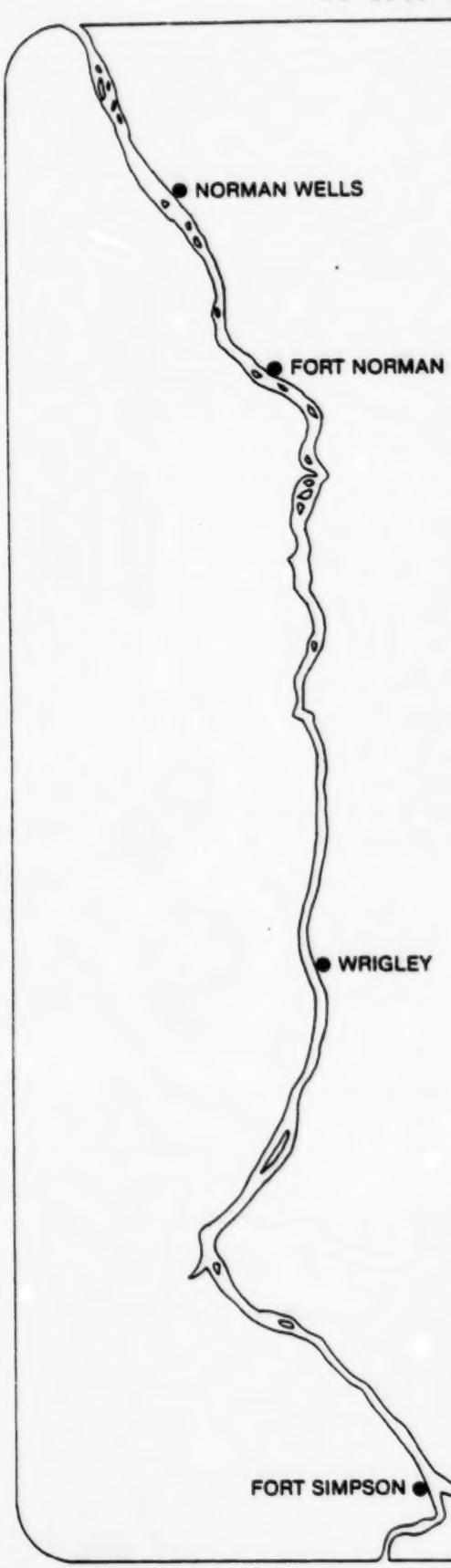
	strong effect	some effect	no effect	decreased effect
Increased alcohol/drug abuse	☐	☐	☐	☐
Improved community facilities/services	☐	☐	☐	☐
Increased family problems/breakdown	☐	☐	☐	☐
Provided job experience/training	☐	☐	☐	☐
More transients	☐	☐	☐	☐
Increase crime	☐	☐	☐	☐
Increased no. of permanent residents/stability	☐	☐	☐	☐
Overused community facilities	☐	☐	☐	☐
Other _____	☐	☐	☐	☐

8. Overall, what effect has the construction of the Norman Wells Project had on Native Peoples?



a) Of the following possible impacts, what effect has each had on Native Peoples?

	strong effect	some effect	no effect	decreased effect
Native way of life disrupted	☐	☐	☐	☐
Provided jobs/improved Native economy	☐	☐	☐	☐
Increased alcohol/drug abuse	☐	☐	☐	☐
Improved relationship between Native/Non-Native	☐	☐	☐	☐
Boom and bust/no long term benefits	☐	☐	☐	☐
Increased family problems/breakdown	☐	☐	☐	☐
Encouraged long term development	☐	☐	☐	☐
Increased crime	☐	☐	☐	☐
Provided job experience/training	☐	☐	☐	☐
Increased Native/Non-Native conflict	☐	☐	☐	☐
Other _____	☐	☐	☐	☐



NORMAN WELLS PROJECT

COMMUNITY BUSINESS AND PUBLIC SERVICES SURVEY

The purpose of the Department of Indian Affairs and Northern Development Business and Public Services Survey is to:

1. Prepare a community business and public services database
2. Enable the monitoring of the impact of the Norman Wells Project on businesses and public services in your community
3. Evaluate data and prepare reports for your community and the Department of Indian Affairs and Northern Development to help identify the costs and benefits of the Norman Wells Project.

John Hucker
Director-General
Northern Policy and
Coordination Branch
Department of Indian
Affairs and Northern
Development
Ottawa

Interview Log 1985

35

1. Community: _____

2. Date _____
   day month year

3. Business Name: _____

4. Interviewee: _____

5. Response Type: Completed ☐
   Refusal ☐
   Informant ☐

6. Business Type: _____

Business and Public Services Registry

1. How long has the business/service operated in this community?

   _____ years.

2. Approximately what percentage of your total Northern business/service is attributed to each of the following communities:

Norman Wells	_____%
Ft. Norman	_____%
Wrigley	_____%
Ft. Simpson	_____%
_____	_____%
_____	_____%

3. Has your firm received a contract for work on the Norman Wells Project.

   1984 Yes: ☐ No: ☐ Amt $_____

   6/85 Yes: ☐ No: ☐ Amt $_____

4. On the accompanying chart, please estimate the gross wages, including your salary, paid by your business/service in the past 12 months.

less than $10,001	☐
10,001 - 25,000	☐
25,001 - 50,000	☐
50,001 - 100,000	☐
100,001 - 250,000	☐
250,001 - 500,000	☐
500,001 - 750,000	☐
750,001 - 1,000,000	☐
1,000,001 - 2,000,000	☐
more than 2,000,000	☐

5. What impact has the completion of the Norman Wells Project had on your business?

   ☐ increase business
   ☐ decrease business
   ☐ no impact
   ☐ go out of business/cease operations in this community

6. Overall, what would you say that the impact of the Norman Wells Project has been on:

   (a) your business:

   bad — no effect — good
   – 100 — 0 — + 100
   ← Increasing — Increasing →

   (b) your community:

   bad — no effect — good
   – 100 — 0 — + 100
   ← Increasing — Increasing →

Reasons:

Business	Community
1. _____	1. _____
2. _____	2. _____

7. Input - Output Information

Estimate what proportion (%) of your Northern business revenues and expenditures are made within each sector. Then estimate the proportion (%) of that sector's expenditure/revenue which is spent or obtained locally.

The sectors are:
1. Oil/Mining/Manufacturing
2. Construction
3. Transportation
4. Retail/Hotel/Food Services, etc.
5. Administrative Services, Medical, Education, etc.
6. Traditional (Hunting, Trapping)

a) Expenditures

Sector	1	2	3	4	5	6	Total
Total							100%
Local							

b) Revenue:

Sector	1	2	3	4	5	6	Total
Total							100%
Local							

c) Estimate the **total expenditure**, excluding wages:

less than $10,001	☐
10,001 - 25,000	☐
25,001 - 50,000	☐
50,001 - 100,000	☐
100,001 - 250,000	☐
250,001 - 500,000	☐
500,001 - 750,000	☐
750,001 - 1,000,000	☐
1,000,001 - 2,000,000	☐
2,000,001 - 10,000,000	☐
more than 10,000,000	☐

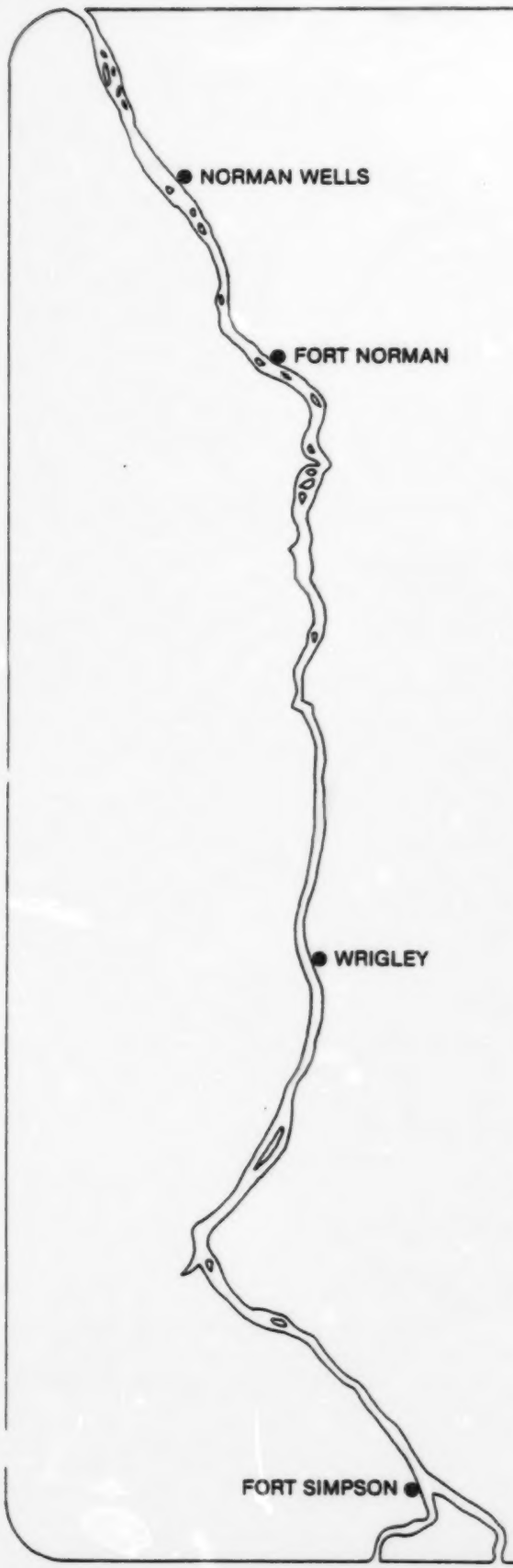
d) Estimate the **total gross revenue**:

less than $10,001	☐
10,001 - 25,000	☐
25,001 - 50,000	☐
50,001 - 100,000	☐
100,001 - 250,000	☐
250,001 - 500,000	☐
500,001 - 750,000	☐
750,001 - 1,000,000	☐
1,000,001 - 2,000,000	☐
2,000,001 - 10,000,000	☐
more than 10,000,000	☐

8. Employee Registry For the Past 12 Months (July 1984 to June 1985)

Surname	First Name	Sex	Age	Job Classification	Employment with Firm: Starting Date (month/yr.)	Employment with Firm: Finishing Date (month/yr.)	Description of Job: Full-time/ Part-time*	Description of Job: Seasonality (months/year) 1-3	4-6	7-9	10-12	Commuter Pick-up Point

*Full-time ≥ 30 hours/week



NORMAN WELLS PROJECT

COMMUNITY HOUSEHOLD SURVEY

The purpose of the Department of Indian and Northern Affairs Household Survey is to:

1. Prepare a community database
2. Monitor the impact of the Norman Wells Project in the four MacKenzie Valley communities
3. Provide data for your community and the Department of Indian and Northern Affairs to help maximize benefits of the Norman Wells Project to members of your community

John Mar

Norman Wells Project
Co-ordinator

Department of Indian and
Northern Affairs,
Yellowknife

Interview Log 1984

1. Community: _____

2. Household Location:

   lot _____ block _____

3. Date: _____ _____ _____
   day month year

4. House size:

   small (< 600 ft^2) ☐

   medium (600 - 1000 ft^2) ☐

   large (> 1000 ft^2) ☐

5. House Type:

   Tent ☐

   Log/Shack ☐

   Frame ☐

   Trailer ☐

   Apartment ☐

   Other _____ ☐

6. Response Type:

   no answer ☐ ☐ ☐

   refusal ☐

   completed ☐

7. House Condition:

   low ☐ medium ☐ high ☐

Population-Occupation Registry

1. Interviewee: _____

2. If not recorded in 1982 survey, how long have you lived in this community?

   _____ years

3. If you have moved to this community in the last five years, why did you move here? (rank the two most important reasons)

   friends and relatives lived here _____

   attracted by community services _____

   start up a new business _____

   wage employment _____

   liked this community _____

   attracted by the Norman Wells Project _____

   _____ _____

4. If you have moved to this community in the last five years where did you previously live?

   1: _____ _____

   2: _____ _____

   3: _____ _____
   community years

5. Do you or any members of your household plan to leave this community to live permanently in another community in the next 12 months?

   no ☐

   yes ☐

   a. If ***yes,***

      where? _____

   b. Please rank the advantages of living in the community you plan to move to (rank on a scale of 1 to 8, 1 being most advantageous, 8 being least).

      lower prices and greater variety of goods and services _____

      better recreational-entertainment facilities _____

better job opportunities _____

close to friends and relatives _____

better housing conditions _____

less isolated _____

opportunity to fish, hunt and trap _____

like living in the south _____

5c. Please rank the reasons most likely to keep you from moving (rank on a scale of 1 to 8).

cost of moving _____

miss outdoor recreation activities _____

already have a good job in this community _____

loss of close contact with friends and relatives _____

lower prices and greater variety of goods and services in this community _____

loss of opportunity to speak Slavey _____

access to good hunting, trapping, and fishing areas _____

like living in the north _____

Norman Wells Project _____

6. In the last 12 months, have any members of your household left this community to live permanently in another settlement (excluding students)?

no ☐ yes ☐

a. If **yes**, where? _____

b. Rank the two most important reasons for the move.

friends and relatives live there _____

attracted by community services _____

start up a new business _____

wage employment _____

like that community _____

to get away from the Norman Wells Project _____

7. Occupant Information (list all household members)

Surname							
First Name							
Sex/Age							
Languages Spoken	1..... 2..... 3.....	1..... 2..... 3.....	1..... 2..... 3.....	1..... 2..... 3.....	1..... 2..... 3.....	1..... 2..... 3.....	1..... 2..... 3.....
Birthplace							
Marital Status							
Present Activity*							
Education Level							

* Present Activity code: full-time job = 1; part-time job = 2; unemployed = 3; housewife = 4; retired = 5; student = 6; pre-school = 7.

8. Head of household descent:

	Male	Female		Male	Female
Treaty Indian	☐	☐	Metis	☐	☐
Non-status Indian	☐	☐	Inuit	☐	☐
			Other	☐	☐

9. Worker Information		1	2	3	4
First Name					
Present Employer (or self employed)					
Present Occupation					
Length of Employment (month to month)					
Type of Employment					
hours/week					
months/year					
Other employers from 1984 to July 1982	1.				
	2.				
	3.				
	4.				
	5.				
Occupations associated with each employer	1.				
	2.				
	3.				
	4.				
	5.				
Employment period associated with each employer	1.				
	2.				
	3.				
	4.				
	5.				

	1	2	3	4	5
Total Wages 1983					
Total Wages 1/84 to 6/84					
Expected Wages 1984					

General Hunting License Yes ☐ No ☐

Did you trap 1982 Yes ☐ No ☐

1983 Yes ☐ No ☐

Fur Sales 1982 $

1983 $

10. Did you stop trapping to work on the Norman Wells Project?
Yes ☐ No ☐

11. Do you plan to return to trapping when the Norman Wells Project is completed?
Yes ☐ No ☐

12. Did you start trapping in 1983 because of the newly cleared right of way?
Yes ☐ No ☐

Norman Wells Employee Information:

Name: _____

1. If you or a member of your household have/had a job with Esso, IPL or one of their contractors working on the Norman Wells Project, was it:

☐ a) a local job where you lived at home

☐ b) a work camp job where you lived at the camp

☐ c) a work camp job where you lived at home

☐ d) a rotational job where you commuted to work by air

☐ e) other: _____

	Job 1	Job 2	Job 3	Job 4
2. How long have you worked at this job?				
Reasons for changing job? 1.				
2.				
3.				
3. What is/was your occupation?				
4. Name of Employer				

5. Rate your job satisfaction

Job 1: dissatisfying _____ satisfying
neutral

Job 2: dissatisfying _____ satisfying
neutral

Job 3: dissatisfying _____ satisfying
neutral

Job 4: dissatisfying _____ satisfying
neutral

6. Rank the most satisfying and dissatisfying aspects of your job

JOB 1

Rank	Satisfying	Rank	Dissatisfying
1		1	
2		2	
3		3	
4		4	
5		5	

JOB 2

1		1	
2		2	
3		3	
4		4	
5		5	

JOB 3

1		1	
2		2	
3		3	
4		4	
5		5	

JOB 4

1		1	
2		2	
3		3	
4		4	
5		5	

7. If you have been employed as a commuter, by Esso or one of its contractors, where did you commute fro

_____

8. How long had/have you held this commuting job _____ (yrs/months)?

9. Would you prefer to continue to commute to Norman Wells or to reside permanently in Norman Wells with your family? Yes ☐ No ☐ Yes ☐ No ☐

10. Please rank the reasons for your decision (or why you stopped being a commuter.)

1. _____

2. _____

3. _____

4. _____

11. Describe the type of commuting by number of days in and out _____

Consumer Survey

1. How often do you shop in these places?

	once a week	once a month	a few times a year	never
Norman Wells	☐	☐	☐	☐
Ft. Norman	☐	☐	☐	☐
Wrigley	☐	☐	☐	☐
Ft. Simpson	☐	☐	☐	☐
Inuvik	☐	☐	☐	☐
Yellowknife	☐	☐	☐	☐
Hay River	☐	☐	☐	☐
Ft. Providence	☐	☐	☐	☐
Edmonton	☐	☐	☐	☐
Mail order Regina	☐	☐	☐	☐
_____	☐	☐	☐	☐
_____	☐	☐	☐	☐
_____	☐	☐	☐	☐

2. Goods and services consumption:

Do you or your household members receive the majority of these goods from business and service institutions in this community?

	Yes	No	N/A	If *No*, where do you receive these goods?
1. Doctor	☐	☐	☐	_____
2. Optician	☐	☐	☐	_____
3. Dentist	☐	☐	☐	_____
4. Banking	☐	☐	☐	_____
5. Appliances-Furniture	☐	☐	☐	_____
6. Drugs-Confectionary	☐	☐	☐	_____
7. Groceries	☐	☐	☐	_____
8. Shoes-Clothing	☐	☐	☐	_____
9. Liquor	☐	☐	☐	_____
10. Hardware	☐	☐	☐	_____
11. Automobiles	☐	☐	☐	_____
12. Lumber	☐	☐	☐	_____
13. Snowmobiles	☐	☐	☐	_____
14. Canoes-Boats	☐	☐	☐	_____
15. Hunting Supplies	☐	☐	☐	_____

3. How much of your ***total*** shopping bill is spent in:

Norman Wells	_____%
Ft. Norman	_____%
Wrigley	_____%
Ft. Simpson	_____%
Inuvik	_____%
Yellowknife	_____%
Hay River	_____%
Ft. Providence	_____%
Edmonton	_____%
Mail Order Regina	_____%
_____	_____%
TOTAL	_____%

4. How much of your household food is 'country food'?

none or almost none	(0 - 5%)	☐
very little	(6 - 15%)	☐

some	(16 - 39%)	☐	most	(76 - 94%)	☐
about half	(40 - 60%)	☐	all or nearly all	(95 - 100%)	☐
quite a lot	(61 - 75%)	☐			

Perception Survey

1. Is there a need for more jobs in your community?

   yes ☐ no ☐ undecided ☐

   Full-time Jobs Yes ☐ No ☐

   Part-time Jobs Yes ☐ No ☐

2. Do you favor increased economic development in the Mackenzie Valley?

   yes ☐ no ☐ undecided ☐

3. If ***yes,*** do you favor:

   large-scale (mega-type) projects ☐

   small-scale (mini-type) projects ☐

4. Rank the following types of development according to your preference on a scale of 1 to 7; 1 being the most preferred, 7 being least preferred.

   forestry _____ road construction _____

   mining _____ house construction _____

   tourism _____ fish/trap/hunt _____

   pipeline construction _____

5. Do you favour joint development projects between private companies and native organizations?

   yes ☐ no ☐ undecided ☐

6. Overall, would you say that the Norman Wells Project has been "good", "bad" or had "no effect" on

(a) you:

bad _____|_____ good

neutral

(b) family:

bad _____|_____ good

neutral

(c) community:

bad _____|_____ good

neutral

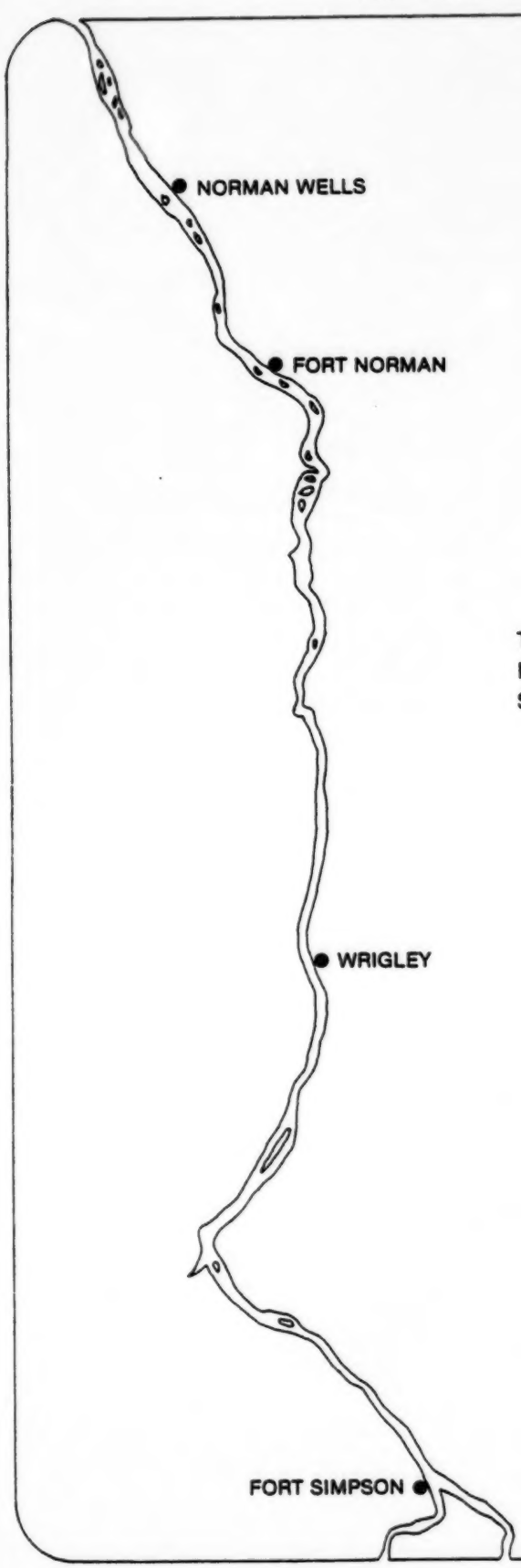
(d) native/white peoples:

bad _____|_____ good

neutral

MAIN REASONS:

You	Family	Community	Native/White Peoples
1. _____	1. _____	1. _____	1. _____
2. _____	2. _____	2. _____	2. _____
3. _____	3. _____	3. _____	3. _____
4. _____	4. _____	4. _____	4. _____
5. _____	5. _____	5. _____	5. _____



NORMAN WELLS PROJECT

COMMUNITY BUSINESS AND PUBLIC SERVICES SURVEY

The purpose of the Department of Indian and Northern Affairs Business and Public Services Survey is to:

1. Prepare a community business and public services database
2. Enable the monitoring of the impact of the Norman Wells Project on businesses and public services in your community
3. Provide data for your community and the Department of Indian and Northern Affairs to maximize benefits to the business members of this community and to ensure a continued level of public services

John Mar
Norman Wells Project
Co-ordinator
Department of Indian and
Northern Affairs,
Yellowknife

1984
Interview Log

1. Community: _____

2. Date _____
   day month year

3. Business Name: _____

4. Recorded in 1983 Survey: Yes ☐
   No ☐

5. If no, Business type: _____

Business and Public Services Registry

1. If not recorded in 1983 survey, how long has the business/service operated in this community?

   _____ years.

2. Approximately what percentage of your total business/service is attributed to each of the following communities:

Norman Wells	_____%
Ft. Norman	_____%
Wrigley	_____%
Ft. Simpson	_____%
_____	_____%
_____	_____%
_____	_____%
_____	_____%

3. Has your business/service
   a) lost workers to the Norman Wells Project
      Yes: ☐ No: ☐
   b) Has this adversely affected your operations
      Yes: ☐ No: ☐

4. Has your firm received a contract for work on the Norman Wells Project.

   1982 Yes: ☐ No: ☐ Amt $_____

   1983 Yes: ☐ No: ☐ Amt $_____

   6/84 Yes: ☐ No: ☐ Amt $_____

5. On the accompanying chart, please estimate the gross wages, including your salary, paid by your business/service in the past 12 months.

less than $10,000	☐
10,001 - 25,000	☐
25,001 - 50,000	☐
50,001 - 100,000	☐
100,001 - 250,000	☐
250,001 - 500,000	☐
500,001 - 750,000	☐
750,001 - 1,000,000	☐
1,000,001 - 2,000,000	☐
more than 2,000,000	☐

6. Overall, what would you say that the impact of the Norman Wells Project has been on:
   (a) your business:
   bad _____|_____ good
   neutral

   (b) your community:
   bad _____|_____ good
   neutral

   (c) your family:
   bad _____|_____ good
   neutral

Reasons: Business

1. _____
2. _____
3. _____
4. _____
5. _____

Community

1. _____
2. _____
3. _____
4. _____
5. _____

Family

1. _____
2. _____
3. _____
4. _____
5. _____

7. Input - Output Information

(a) Estimate what proportion (%) of your business expenditures are made within each sector.

Sector	1	2	3	4	5	6	Total
Total							100%
Local							

The sectors are:
1. Mining/Manufacturing
2. Construction
3. Transportation
4. Retail/Hotel/Food Services, etc.
5. Administrative Services, Medical, Education, etc.
6. Traditional (Hunting, Trapping)

(b) Estimate the total expenditure, excluding wages $ _____

(c) Estimate what proportion (%) of your business revenues come from each sector.

Sector	1	2	3	4	5	6	Total
Total							100%
Local							

(d) Estimate the total (gross) revenues $ _____

8. Employee Registry For the Past 12 Months (June 1984 to July 1983)

Surname	First Name	Sex	Age	Job Classification	Length of Employment (Years)	Months/Year	Hours/Week	Length of Residency in Community (Years or Months)	Northerner	Annual Salary	Commuter Pick-up Point